

From the INTERNATIONAL BUREAU

**PCT**NOTIFICATION CONCERNING  
TRANSMITTAL OF COPY OF INTERNATIONAL  
APPLICATION AS PUBLISHED OR REPUBLISHED

To:

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31 SEP 2005

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B-3020 Winksele  
BELGIQUEDate of mailing (day/month/year)  
15 September 2005 (15.09.2005)Applicant's or agent's file reference  
M3153-PCT**IMPORTANT NOTICE**International application No.  
PCT/EP2004/013435International filing date (day/month/year)  
26 November 2004 (26.11.2004)Priority date (day/month/year)  
01 December 2003 (01.12.2003)

Applicant

MATERIALISE N.V. et al

The International Bureau transmits herewith the following documents:

copy of the international application as published by the International Bureau on under  
No. WO

copy of international application as republished by the International Bureau on 15 September 2005 (15.09.2005) under  
No. WO 2005/053564

For an explanation as to the reason for this republication of the international application, reference is made to INID codes (15), (48) or (88) (*as the case may be*) on the front page of the attached document.

The International Bureau of WIPO  
34, chemin des Colombettes  
1211 Geneva 20, Switzerland

Authorized officer

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(74) Agents: **BIRD, Ariane et al.; Bird Goen & Co, Klein Dalenstraat 42A, B-3020 Winksele (BE).**

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(71) **Applicant** (for all designated States except US): MATERIALISE N.V. [BE/BE]: Technologelaan 15, B-3001 Leuven (BE).

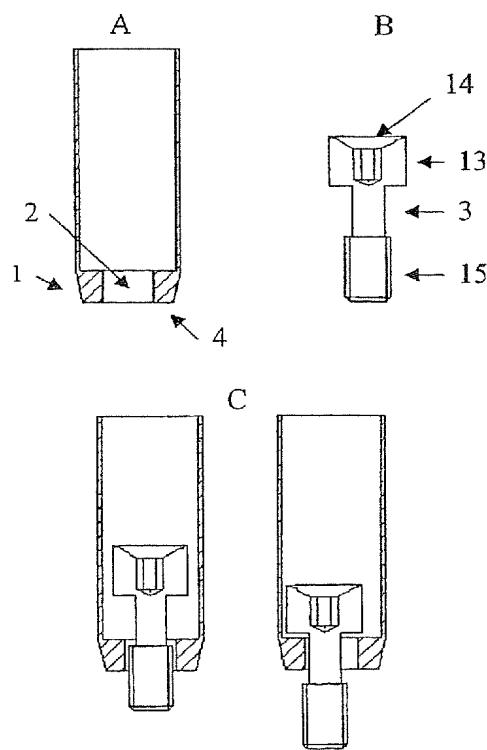
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*[Continued on next page]*

(54) **Title:** METHOD FOR MANUFACTURING A PROSTHESIS MADE PRIOR TO IMPLANT PLACEMENT



(57) **Abstract:** A dental implant-to-prosthesis interface is provided, allowing lateral misalignments between the fixture heads and the connections to the prosthesis. This type of interface, in combination with a dedicated screw for fixing implant to prosthesis, allows the use of a truly pre-manufactured prosthesis for immediate loading on the implant. This system is particularly suited for cases with multiple implant placement.

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**Declaration under Rule 4.17:**

— *of inventorship (Rule 4.17(iv)) for US only*

**Published:**

- *with international search report*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

**(88) Date of publication of the international search report:**

15 September 2005

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP2004/013435

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 A61C8/00

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 A61C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EP0-Internal, WPI Data, PAJ

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 92/03984 A (WILJE, OSCAR) 19 March 1992 (1992-03-19) page 5, paragraphs 2,3 figures 1-3 ----- US 5 564 925 A (SHAMPANIER ET AL) 15 October 1996 (1996-10-15) column 2, line 63 - column 3, line 6 figures 4,5 ----- WO 97/10770 A (IMPLANT INNOVATIONS, INC) 27 March 1997 (1997-03-27) page 8, lines 9-12 figure 4 ----- - / --	1,2,4-6, 9,27  1,2,5,6  17-20
X		

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

\* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

Date of mailing of the international search report

11 April 2005

04 JUL 2005

Name and mailing address of the ISA  
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Chabus, H

## INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP2004/013435

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 955 811 A (LAZZARA ET AL) 11 September 1990 (1990-09-11) column 6, lines 29-53 figures 9-12 -----	23-26
A	US 4 988 297 A (LAZZARA ET AL) 29 January 1991 (1991-01-29) cited in the application figure 5 -----	1

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/EP2004/013435

## Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1.  Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:
  
2.  Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
  
3.  Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1.  As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
  
2.  As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
  
3.  As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
  
4.  No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-12, 17-20, 23, 24-26, 27

Remark on Protest

The additional search fees were accompanied by the applicant's protest.

No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-12, 17-20, 23, 24-26, 27

Combination of dedicated dental implant or implant assembly, prosthesis and retaining screw wherein the diameter of the screw is smaller than the diameter of the anchorage part of the prosthesis. Impression coping with an anchorage part including a flat surface. Burn-out cylinder comprising a proximal end which comprises a flat surface. Threaded dental implant.

1.1. claims: 1-12, 17-20

Combination of dedicated dental implant or implant assembly, prosthesis and retaining screw wherein the diameter of the screw is smaller than the diameter of the anchorage part of the prosthesis.

1.2. claim: 23

Impression coping with an anchorage part including a flat surface.

1.3. claims: 24-26

Burn-out cylinder comprising a proximal end which comprises a flat surface.

1.4. claim: 27

Dental implant with threaded shaft.

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2. claims: 13-16

Dental implant replica comprising a flat-surfaced proximal end.

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3. claims: 21 -22

Centering screw with tapered distal section.

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4. claims: 28-29

Combination of an impression coping and impression coping screws wherein one or more of the impression coping screws have a flat cylindrical head or a bulbous head.

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## INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2004/013435

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
WO 9203984	A	19-03-1992	SE AU SE WO	466935 B 8493791 A 9002805 A 9203984 A1		04-05-1992 30-03-1992 05-03-1992 19-03-1992
US 5564925	A	15-10-1996	IL	112989 A		15-06-1998
WO 9710770	A	27-03-1997	WO AU EP JP JP	9710770 A1 3636195 A 0786966 A1 10509371 T 3494656 B2		27-03-1997 09-04-1997 06-08-1997 14-09-1998 09-02-2004
US 4955811	A	11-09-1990	NONE			
US 4988297	A	29-01-1991	NONE			



From the INTERNATIONAL BUREAU

**PCT**INFORMATION CONCERNING ELECTED  
OFFICES NOTIFIED OF THEIR ELECTION

(PCT Article 31(7) and Rule 61.3)

To:

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7.8.2005

BIRD, Ariane  
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BELGIQUEDate of mailing (day/month/year)  
18 August 2005 (18.08.2005)Applicant's or agent's file reference  
M3153-PCT**IMPORTANT INFORMATION**International application No.  
PCT/EP2004/013435International filing date (day/month/year)  
26 November 2004 (26.11.2004)Priority date (day/month/year)  
01 December 2003 (01.12.2003)

Applicant

MATERIALISE N.V. et al

1. The applicant is hereby informed that the International Bureau has, according to Article 31(7), notified each of the following Offices of its election:  
**EP:** AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR  
**National:** BG, CA, CN, CZ, DE, JP, KP, KR, MN, NO, PL, RO, RU, SK, US
2. The following Offices have waived the requirement for the notification of their election; the notification will be sent to them by the International Bureau only upon their request:  
**AP:** BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW  
**EA:** AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
**OA:** BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  
**National:** AE, AG, AL, AM, AT, AU, AZ, BA, BB, BR, BW, BY, BZ, CH, CO, CR, CU, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MW, MX, MZ, NA, NI, NZ, OM, PG, PH, PT, SC, SD, SE, SG, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW
3. Since the election(s) was (were) made after the expiration of 19 months from the priority date, the applicant is reminded that he must, subject to the following paragraph, enter the national phase within 20 months from the priority date (or later in some Offices) before **some of the designated Offices** in respect of which Article 22(1), as modified with effect of 1 April 2002, does not apply, by paying the national fee(s) and furnishing, if prescribed, a translation of the international application.

**However,** in respect of **most other designated Offices**, the time limit of 30 months (or later) may nevertheless apply. See the Annex to Form PCT/IB/301 and, for details about the applicable time limits, Office by Office, see the *PCT Applicant's Guide*, Volume II, National Chapters, the *PCT Newsletter* and the WIPO Internet site, updated regularly.

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